

**Amendment to the Drawings:**

The attached sheets of drawings include changes to Figures 1, 2, 3, 4 and 5. These sheets, which include Figure 1-5, replace the original sheets including Figures 1-5. In Figure 1, reference sign 5 has been added. In Figure 2, reference signs 9, 5 and 40 have been added. In Figure 3, reference sign 5 has been added. In Figure 4, reference signs 5 and 9 have been added. In Figure 5, reference sign 5 has been added.

Attachment: Replacement Sheet

### REMARKS

The Office Action dated September 27, 2006 has been received and carefully studied.

The Examiner objects to the drawings for failing to include reference numerals 5, 9 and 40 mentioned in the specification. Submitted herewith are replacement drawings for Figures 1-3 with the appropriate corrections.

The Examiner objects to claims 6-16, 20-27 and 31-33 under 37 C.F.R. §1.75(c) as being in improper multiple dependent form. By the accompanying amendment, the improper multiple dependencies have been eliminated.

The Examiner rejects claims 1-4 and 17-19 under 35 U.S.C. §102(b) as being anticipated by Fraser, U.S. Patent No. 3,517,546. The Examiner states that Fraser discloses a housing 12 capable of traveling in a pipeline 10, and accommodating a hydrophone 15, a timer 27, and a memory 26. The Examiner also rejects claims 5 and 6 under 35 U.S.C. §103(a) as being unpatentable over Fraser, and claims 28-30 as being unpatentable over Fraser in view of Guest, U.S. Patent No. 3,691,819. Regarding claims 5 and 6, the Examiner considers a change in shape to spherical or oval is merely a design consideration and would have been obvious. Regarding claims 28-30, the Examiner cites Guest for its disclosure of a transmitter external to the

pipeline and a leak detection device receiving the transmitted signal. The Examiner concludes that it would have been obvious to modify Fraser by employing monitoring means with a transmitter and receiver in view of Guest.

By the accompanying amendment, claim 1 has been amended by incorporating therein limitations of claims 4 and 10. Claim 17 has been amended to recite that the device is provided to have substantially neutral buoyancy in the fluid passing along the pipeline. Claims 4 and 10 have been cancelled as redundant. Claims 28-30 have been cancelled.

The invention as now claimed relates to a device which, as it passes along the pipeline, is of a size and shape so as to allow the same to pass along the pipeline in the fluid. The device also is provided with substantially neutral buoyancy, which means that the device can pass along the pipeline in the fluid rather than being necessarily in contact with the inner walls of the pipeline and can be provided with propulsion means. This is a significant improvement in that it means that the device travels with and is propelled by the fluid movement. The device does not contact the internal surface of the pipeline and therefore does not cause dislodgement or general unsettlement of any contaminants which will be

present on the inner surface of the pipeline. In turn, this means that the risk of contamination of the fluid by the device passing along the pipeline is minimized.

The substantially neutral buoyancy of the device also means that the device is encouraged to lie in the center of the pipeline as it passes there along, and therefore provides a more accurate indication of the condition of the pipeline walls in all directions surrounding the same.

In contrast, Fraser discloses a completely different system. In Fraser, the detection components, which are provided within the instrument body 12, are required to be centered within the flow of fluid within the pipeline 10 by means of a series of scraper cups 13. These cups are provided to scrape (see, for example, column 2, line 65) along the internal surface of the pipeline and thus, by their nature, will dislodge potential contaminants from the pipeline wall as they move along. This therefore would mean that the fluid which is present in the pipeline, at the time of the device passing along the same, would be contaminated and therefore have to be discarded, particularly when one considers, for example, that the testing may relate to pipelines which carry water supplies. Thus, it will be immediately appreciated that the apparatus disclosed by Fraser has a significant disadvantage in

comparison with the present invention in that the latter requires that the device has no contact with the inner walls of the pipeline.

Guest discloses a device which has a body 10 which includes measuring components therein. As in Fraser, apparatus is required to be provided which depends outwardly from the body to contact with the internal walls 20 of the pipeline. In this case, the apparatus is a series of arms 18 with rollers 16 which depend outwardly in a resilient manner from the body so that the rollers are always forced against the walls of the pipeline so as to position the body centrally of the same as it passes along. As in Fraser, the problem of contamination is created by the fact that the rollers will unsettle and dislodge contaminants from the interior walls of the pipeline and therefore the same problems as with Fraser exist in that contamination of the fluid will be caused by this system.

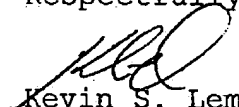
Furthermore, in Guest the movement means in the form of a motor and propeller 46 are required so as to propel the device along the pipeline. This adds to the size and complexity of the device in comparison to the present invention, which does not require any propulsion means. The size and shape and substantially neutral buoyancy of

the instant device allow the device to be moved by the fluid flow along the pipeline.

Accordingly, neither Fraser nor Guest, alone or in combination, disclose or suggest the invention as now claimed.

Reconsideration and allowance are respectfully requested in view of the foregoing.

Respectfully submitted,



Kevin S. Lemack  
Reg. No. 32,579  
176 E. Main Street - Suite 7  
Westboro, Massachusetts 01581  
TEL: (508) 898-1818